



# UNITED STATES PATENT AND TRADEMARK OFFICE

*60*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-----------------------|---------------------|------------------|
| 10/768,771  | 01/30/2004  | Dipankar Bhattacharya | 3-5-8-1-25          | 7070             |
| 7590  | 05/27/2005  |                       | EXAMINER            |                  |
| Ryan, Mason & Lewis, LLP<br>90 Forest Avenue<br>Locust Valley, NY 11560 |             |                       | EASTHOM, KARL D     |                  |
|   |             |                       | ART UNIT            | PAPER NUMBER     |
|   |             |                       | 2832                |                  |

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |                     |
|------------------------------|-----------------|---------------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)        |
|                              | 10/768,771      | BHATTACHARYA ET AL. |
|                              | Examiner        | Art Unit            |
|                              | Karl D. Easthom | 2832                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 April 2005.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 0 is/are allowed.  
 6) Claim(s) 1-5 and 11-14 is/are rejected.  
 7) Claim(s) 6-10 and 15-17 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)  
 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5)  Notice of Informal Patent Application (PTO-152)  
 6)  Other: \_\_\_\_\_.

Art Unit: 2832

1. Claims 1-5, 11, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Aleksandravicius et al. Aleksandravicius discloses the claimed invention at Fig. 9, with resistor body comprising two portions, that of 61 and that part of the portion 60 to the right of where 50,51, and 52 connects to same, terminals 60, 62, (that is, the terminal is the remaining portion of 60 to the left of where elements 50-52 connect). That is, col. 3, lines 55-60 describe forming the resistor and termination out of the same layer 30 at Fig. 9. Therefor, as is typical in the resistor arts, an end portion of the resistor 60, 62 is its terminal or termination. It has a finite resistance, with the resistance between conductive paths dependent upon how one defines the conductive paths. They are defined as noted above where there are an infinite number of conductive paths possible from the region 60 to the regions 61. The at least first and second conductive paths are the two paths defined as paths above and below where terminal 51 exists and flowing from left to right. Of course the resistance is substantially or exactly matched since it is the same material and the same length along the terminal 60 as along the resistor body 60,61. In claim 2, one of the paths includes terminal 51. In claim 3, 50 and 51 comprises one of the paths. In claim 4, the whole piece of metal is a resistive element that includes terminals that are one piece with same. In claim 5, the whole device can be rotated so that the left end is above, or on top, for example. For claim 11, see remarks above where the matching is as noted. In claims 13-14, see col. 1, lines 40-50 for the integrated circuit such as a MOSFETS, etc. The substrate is the silicon wafer at col. 1, lines 40-65.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aleksandravicius et al. in view of Greitschus et al. The claimed invention is disclosed except the materials. Greitschus discloses semiconductor material for a ladder network similar to that of Aleksandravicius employing a generic semiconductor material and metal 6, 8 for the terminals so that such a combination would' have been obvious where polysilicon is a known resistor material and Aleksandravicius discloses at col. 1 any type of resistor material can be employed at col. 1, lines 60-65. Applicant also admits at col. 4, lines 19-20 that polysilicon resistors are known in the art.

4. Claims 6-10 and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 6-10 and 15-17 are allowable for reasons set forth in the previous Office action, where it is here noted that there is no 112 rejection contrary to the wrong form paragraph employed mistakenly indicating such a rejection in the last action as applicant correctly noted in his 4/9/5 remarks.

5. Applicant's arguments filed 4/9/5 have been fully considered but they are not persuasive. Applicant argues that Aleksandravicius does not disclose the limitation of

the one terminal configured such that its resistance is not substantially matched to the resistance body because the examiner is employing portions of the resistor body as the terminals. The claim does not preclude this interpretation since the terminals are the ends of the resistance element, which is known nomenclature in some devices, especially where the geometry and resistance at the ends is different. Applicant argues that a termination is not a terminal, but applicant's claim requires no such distinction and this is not correct as noted at col. 6, lines 10-16, col. 3, lines 55-60, where the ends of the resistor are noted as both terminal or termination connections since the same piece of metal is patterned to define the resistor and the terminals or terminations, compare col. 6, lines 10-16 to col. 3, lines 55-60. Applicant argues that the terminals are resistor regions is not well taken, since all terminals have finite resistance and are modeled as such, so this is not a distinction, especially where same are claimed to be "substantially matched". As to claim 4, the wire bond is not required to satisfy the claim since the portions of the resistor are part of the whole piece.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D. Easthom whose telephone number is (571) 272-1989. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karl D Easthom  
Primary Examiner  
Art Unit 2832

KDE